

OCTOBER 18, 1916

VOL. VI, PP. 29-35

PROCEEDINGS  
OF THE  
NEW ENGLAND ZOÖLOGICAL CLUB

---

## TWO NEW ANTS FROM TEXAS AND ARIZONA.

BY WILLIAM MORTON WHEELER.

---

THE two peculiar Myrmicine ants described in the following pages, like so many other species of the same genera, are properly neotropical, but as they were taken within our boundaries, we must include them in the fauna of the United States. The *Pheidole* has evidently strayed from the tierra caliente of Eastern Mexico, the *Cryptocerus* from the Mexican highlands. The former is most closely related to a species known only from Guatemala and Costa Rica, the latter to one known only from the State of Morelos.

***Pheidole ridicula* sp. nov.**

*Soldier* (fig. 1, *a* and *b*). Length about 5 mm.

Closely related to *Ph. absurda* Forel. Head very large (nearly 2.5 mm. long), one and one half times as long as broad, distinctly broader at the anterior border than behind, with concave cheeks, straight sides, deeply and angularly excised posterior border, flattened dorsal and slightly convex gular surface. Mentum without teeth. Occipital groove deep, continued forward nearly to the frontal area and terminating in a small ocellus-like pit. Eyes small, rather flat, a little behind the anterior fifth of the head. Mandibles very convex. Clypeus very short, ecarinate,

flattened, its anterior border very feebly and broadly sinuate in the middle. Frontal area rather deep, triangular, with a median carinula. Frontal carinae short, subparallel. Antennae very short, the scapes reaching the lateral borders of the head a little behind the eyes, funicular joints 2-8 distinctly longer than broad, club shorter than the remainder of the funiculus. Thorax small, through the pronotum about half as broad as the

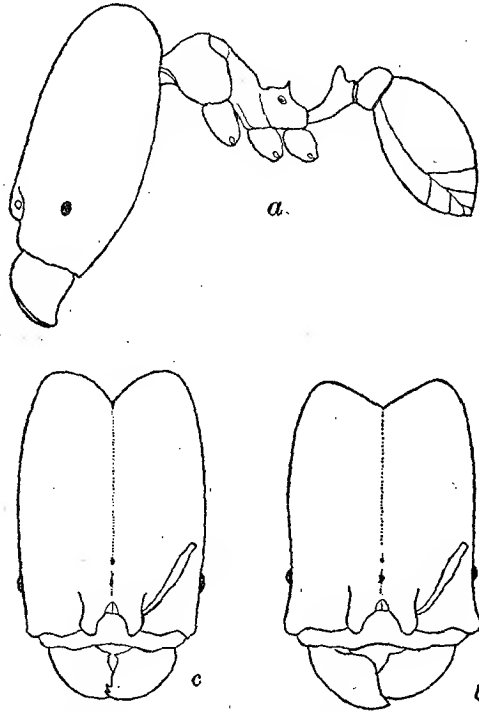


Figure 1.—a, *Pheidole ridícula* sp. nov., soldier in profile; b, head of same from above; c, *Pheidole absurda* Forel, head of soldier from above.

head. The pronotum is feebly convex and sloping in front, straight and transverse above, with rather prominent but rounded humeri and perpendicular sides. Promesonotal suture distinct, somewhat impressed on each side. Mesonotum sloping, straight in profile, without torus or transverse impression, behind more abruptly falling to the deep and rather broad

mesoëpinotal constriction. Epinotum small, as long as broad, a little more than two thirds as broad as the pronotum, with two small, slender, erect, pointed spines, about as long as broad at their bases, and directed upward and outward but not backward. The surface between them is concave and sloping, without a distinct angle between the epinotal base and declivity, bordered laterally by sharp ridges which run into the bases of the spines posteriorly. Petiole less than one and one half times as long as broad, slightly broader behind than in front, with rather straight sides. The node is entire and rather blunt at the summit, and in profile has a long, concave anterior, and short, abrupt posterior, slope. Postpetiole nearly one and one half times as broad as the petiole, and about one and one half times as broad as long, with bluntly angular sides. Gaster much smaller than the head, broadly elliptical, somewhat flattened. Legs rather long, femora somewhat incrassated.

Smooth and shining, covered with sparse, piligerous punctures, which are most distinct on the head. Posterior border of clypeus, antennal foveæ and space between the frontal carinæ, finely and sharply longitudinally rugose. Mesonotum behind, epinotum and petiole, more opaque and finely punctate, rugulose-punctate on the sides.

Hairs fulvous, erect, rather long, uneven, pointed, moderately abundant, covering the whole body, the legs and antennæ, longest on the thorax, pedicel and gaster. Pubescence absent.

Brownish ferruginous; head paler and more reddish; mandibles, clypeus, frontal area, gaster and a very faint cloud on the middle of the head, reddish castaneous; legs more yellowish; antennal scapes not darker than the funiculi.

Described from a single specimen taken by Mr. C. L. Scott at Brownsville, Texas. I have also seen two soldiers of this species from San Diego, Texas, in the Pergande Collection of the U. S. National Museum.

This species is easily distinguished from *Ph. absurda* Forel of Central America by its somewhat smaller size, by the shape of the head (compare fig. 1, *b* and *c*) and pronotum. In *absurda* the upper surface of the pronotum, when seen from the front, is not straight and transverse but convex and rounded. This form also has blunt but distinct teeth on the mentum, the gula is more convex, the petiolar node is distinctly sharper and more compressed antero-posteriorly, the sides of the postpetiole are more rounded, the epinotal spines are longer, blunter and more erect, that is, less deflected laterally, the antennal scapes are black, and the body, and especially the gaster, are much paler and more yellowish. None of these differences is, perhaps, great enough to prevent one from

regarding *ridicula* as an extreme subspecies of *absurda*. I have compared the new form with a paratype of *absurda*, kindly given me by Prof. Emery, and with numerous specimens of the same species which I took some years ago in the neighborhood of Cartago, Costa Rica. The nests of these ants were under flat stones in rather moist, clayey soil, and contained numerous garnered seeds of herbaceous plants, showing that *absurda* is a harvester. The habits of *Ph. ridicula* are undoubtedly the same.

**Cryptocerus (Cyathocephalus) rohweri sp. nov.**

*Soldier* (fig. 2, a). Length 6 mm.

Closely related to *C. wheeleri* Forel. Head as broad as long, with rectangular posterior corners, and surmounted, as in other members of the subgenus, by a broadly subcordate, saucer-shaped structure, with emarginated anterior margin and rather flat floor, feebly convex in the middle. Thorax through the pronotum as broad as the head, a little longer than broad, the pronotum with acute, subdentate anterior corners and a pronounced transverse ridge or crest, indistinctly interrupted in the middle, the lateral borders crenate, converging behind and not angularly produced in front of the mesonotum. Promesonotal suture distinct. Sides of mesonotum rounded and convex, but not angulated. Mesoëpinotal suture distinct. Epinotal spines longer than broad at the base, rather acute; epinotal declivity rather abrupt, longer than the base and feebly concave. Petiole a little broader than long, each side near the middle with a straight, acute, backwardly and outwardly directed spine. Postpetiole distinctly broader than the petiole, about twice as broad as long, laterally and anteriorly with a pair of straight spines as long as those on the petiole and with a similar direction. Gaster oblong-elliptical, with concave anterior border and without dilated anterolateral ridges or margins.

Opaque; mandibles densely punctate-rugulose; head, thorax and pedicel densely punctate or granulated, the concavity of the cephalic saucer somewhat shining and with the fine punctures less dense, covered with round foveolæ, except on the sides and declivity of the epinotum and parts of the mesopleuræ. These foveolæ, which are distinctly shining, are smaller and denser on the petiole and postpetiole, larger and uniformly distributed on the upper surface of the head and thorax. Gaster very opaque, densely granulated, at the base also finely, longitudinally rugulose and with a few elongate, shallow foveolæ. Venter also longitudinally rugulose on its

anterior half. Legs slightly shining, finely and densely punctate and with large, scattered piligerous punctures.

Hairs sparse, short, obtuse and silvery white, absent on the concavity of the cephalic saucer and almost absent on the upper surface of the gaster. Only the foveolæ on the base of the epinotum, and on the upper surface of the petiole and postpetiole, contain short appressed hairs. Hairs on the legs sparse, erect, similar to those on the body but a little longer.

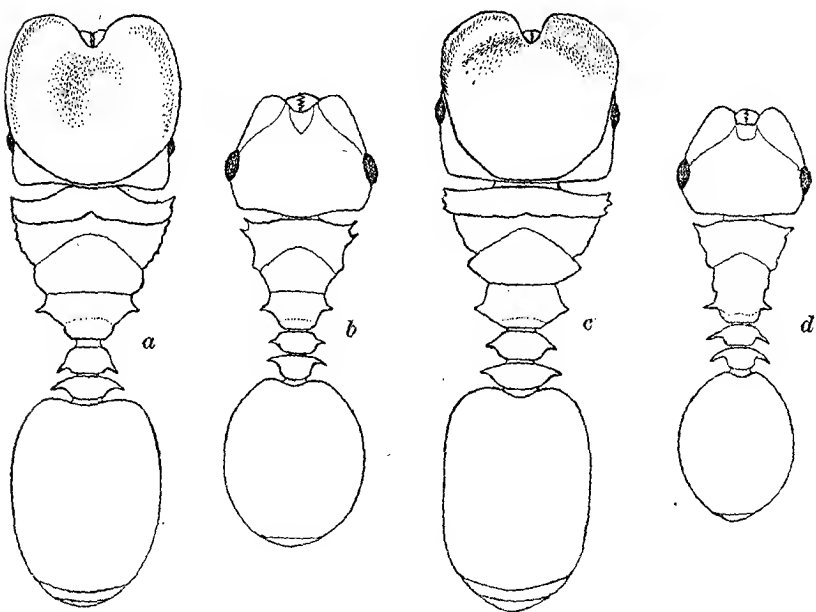


Figure 2.— a, *Cryptocerus rohweri* sp. nov., soldier, dorsal view; b, worker of same; c, *Cryptocerus wheeleri* Forel, soldier; d, worker of same.

Black; anterior border of cephalic saucer scarcely translucent, dull red-dish; extreme tips of antennæ, knees and terminal tarsal joints, of the same color.

*Worker* (fig. 2, b). Length 4.3 mm.

Head trapezoidal, rather flat above, with the horizontally expanded frontal carinæ rounded in front and very thick, so that they are only slightly translucent, the posterior corners bluntly angular, the posterior margin

nearly straight. Clypeus distinct, subtriangular. Thorax narrower than the head, longer than broad, broadest through the pronotum, flattened above, without pronotal crest, with distinct promesonotal and very indistinct mesoepinotal sutures. Each side of the pronotum bears a pair of subequal acute spines in front and a rectangular tooth behind. Epinotum with a pair of spines as long as those at the anterior corners of the pronotum. Petiole and postpetiole similar to those of the soldier but of more nearly equal breadth, and the postpetiole is proportionally longer. Gaster regularly elliptical, like that of the soldier, without anterolateral ridges.

Sculpture like that of the soldier, but the foveolæ on the head and thorax smaller, the thoracic dorsum, mesopleuræ and sides of epinotum also coarsely longitudinally rugose, and the gaster finely longitudinally rugose over its whole surface.

Erect, obtuse, silvery white hairs more abundant than in the soldier, and present also on the upper surface of the head and gaster. The silvery appressed hairs are longer and more conspicuous, and occur in the foveolæ over the whole dorsal surface as well as on the petiole and postpetiole.

Color like that of the soldier. The expanded frontal carinæ are deep reddish, as are also the tips of the antennæ, the mandibles, tips of tibiæ and the terminal tarsal joints.

Described from two soldiers and two workers received from Mr. S. A. Rohwer. These and a series of cotypes in the National Museum were taken by Mr. Chrisman in Buckman Canyon, Santa Catalina Mountains, Arizona. Mr. Rohwer writes me that the ants were found "in galleries excavated at the base of dead limbs and against the green wood of palo verde (*Cercidium torreyanum*). Mr. Chrisman states that these ants are quite common in that vicinity, always occurring in galleries in this tree."

*C. rohweri* can be readily distinguished from *C. wheeleri*, which I found many years ago nesting in epiphytes (*Tillandsia*) near Cuernavaca, Mexico, by its somewhat larger size (the soldier of *wheeleri* measures only 5–5.5 mm., the worker only 3.2–3.6 mm.), and by several peculiarities of structure, sculpture, pilosity and color. Most of the structural differences will be apparent from a comparison of the figures (fig. 2, *a–d*). In the soldier of *wheeleri* (fig. 2, *c*) the border of the cephalic saucer is much lower laterally and posteriorly than in *rohweri*, but the anterior translucent portion is somewhat more extensive, and the top of the head forming the floor of this structure is flattened behind and transversely convex in front. The pronotal crest is more distinctly interrupted in the middle, the surface of the body and especially of the gaster is dis-

tinctly smoother and more shining, and the foveolæ are smaller and sparser on the head, thorax and pedicel. In the worker *wheeleri* (fig. 2, *d*), besides the structural differences shown in the figures, the mesoëpinotal suture is seen to be obsolete, the expanded frontal carinæ are larger, thinner and whitish yellow, and the antennæ, knees, tibiæ and tarsi are red. The foveolæ of the head have appressed silvery hairs like those on the thorax and pedicel, and the erect hairs are much longer and more conspicuous than in the worker *rohweri*.

Besides *C. rohweri* only two species of *Cryptocerus* are known to cross the southern boundary of the United States, *C. varians* F. Smith, which occurs on the southern tip of Florida, and *C. texanus*, recently described by Santschi from Texas, without precise locality. Of this form I have long had specimens taken by Mr. Charles Schaeffer at Brownsville, Texas, but I referred them to *C. angulosus* Mayr, under which name they are cited in my ant book.